Understanding the Moore County Travel Demand Model

MCTC Meeting September 10, 2014

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Understanding the Moore County Travel Demand Model Summary

What is a Travel Demand Model?

A computer model that:

- Turns people and jobs into trips
  (*example: from your house to work*)
  - These trips are used to provide traffic volumes for the year 2012
- Uses the data the MCTC forecast of people and jobs 20-30 years out
- Estimates what happens to traffic on roads in the county.
- Where congestion is, where roads need to be improved or where new facilities need to be added

Travel demand models are similar to a weather forecasting model where we predict the future so we can plan appropriately.

Purpose of a Travel Demand Model?

The model can assist decision makers in making informed transportation planning decisions based on local data. It is a good way to estimate future transportation needs based on the Moore County growth. *However the decisions are NOT BASED ON THIS TOOL ALONE!*

The model is *NOT a provider of the "answers" but it should be recognized as A TOOL that requires professional judgment.*

It can:
- Provide LOCAL travel data
- Show the impacts of road widenings and new road additions
- Analyze the impacts of transportation plans
- Show the impacts of new interchanges
- Forecast changes in corridor volumes

It cannot:
- Show impacts of new turn lanes at intersection
- Identify induced growth or shifts in land use because of a new road

Application of the Model by Using the Traffic Volumes

By definition, a model is a simplified representation of reality, and no model can reproduce reality perfectly. Not all segments of the model will be exact so some judgment should be used in interpreting the model volume data.

Therefore, on the 2030 and 2040 models it is not recommended to just pull a forecasted number straight off the model, and accept this as a "good" future year number.

Analysts should consider if the forecast on the road is reasonable. Therefore, some 2030 and 2040 traffic volumes may need to be adjusted, to account for imperfections in the model.

Moore County Model Specifics

- Replicates 2012 traffic conditions
- Estimates 2030 and 2040 traffic conditions
- Data was developed by MCTC and the local planning staffs
- Mobile phone data was used to develop the model
- Surpasses all of the NCDOT and National standards for replicating existing conditions

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